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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/329,734 06/10/99 AMES

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EXAMINER

TM02/1001

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NGUYEN, F

ART UNIT

PAPER NUMBER

2674

DATE MAILED:

10/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/329,734

Applicant(s)
IRVING AMES

Examiner
FRANCIS NGUYEN

Art Unit
2674



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to **claims 1-2, and 12**, limitation “ a frictional force component in the plane of said tangential contact in said intersection” (page 11, claim 1, lines 11-12), limitation “ a frictional force component at said contact location” (page 12, claim 2, line 16), limitation “ a frictional force component addition... mouse movement) (page 14, claim 12, lines 8-9) makes the claim indefinite, unclear because the examiner fails to understand how the claimed frictional force component could be a physical means that is touchable, viewable ? The examiner notes that typically, a frictional force component is symbolized as a vector for force analysis/account (e.g. force component is represented as a vector).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1- 4, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bullister (U.S. Patent 6,172,665).

5. As to **claim 1**, (the examiner makes presumption that the claimed friction force component is caused by a ball movement across a surface) in a manually guided pointing operation in a display interface between a user and a computer, the improvement for position control comprising in combination:

a structural intersection (**exposed area 244** in figure 11A) between a curved member (ball 242, column 16, lines 60-67, figure 11a) on a manually moveable pointing member and a stationary surface (column 8, lines 47-52), said curved member further having associated signal generating circuitry (**planar circuit board**, column 3, lines 66-67, **emitter 248**, **detector 250**, column 16, lines 64-67, column 19, lines 18-26) operable to move a cursor in said display (column 1, lines 21-23),

a frictional force component in the plane of said tangential contact in said intersection (since a mouse has a ball 242 for movement across a surface, column 16, lines 60-67, rotational friction is present, column 4, lines 51-52).

6. As to **claim 2**, (the examiner makes presumption that the claimed friction force component is caused by a ball movement across a surface) in a manually guided pointing operation in a display

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interface between a user and a computer, the improvement for position control comprising in combination:

a first type structural intersection (**exposed area 244** in figure 11A) between a curved member (ball 242, column 16, lines 60-67, figure 11a) on a manually moveable pointing member and a stationary surface (column 8, lines 47-52), said curved member further having associated signal generating circuitry (**planar circuit board**, column 3, lines 66-67, column 9, lines 25-26, **emitter 248**, **detector 250**, column 16, lines 64-67, column 19, lines 18-26) operable to move a cursor in said display (column 1, lines 21-23, column 7, lines 1-4),

at least one second type structural intersection between a protrusion and a contact location (low friction pads 26/28/30, column 7, lines 8-20)

a frictional force component at said contact location (column 7, lines 8-20, column 8, lines 53-58).

7. As to **claim 3**, see same citations for claim 2. Note that Bullister discloses **use of rollers** 46/48/49 (column 9, lines 21-26).

8. As to **claim 4**, see same citations for claim 1. Note that Bullister discloses use of mouse pad (column 1, lines 51-53) as well known in the art.

9. As to **claim 12**, (the examiner makes presumption that the claimed friction force component is caused by a ball movement across a surface) in a computer controlled interface involving a display (column 1, lines 11-16) and a manually guided mouse on a mouse pad (column 1, lines 51-53), the improvement for position control comprising in combination:

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a spherical member (**ball 242**, column 16, lines 60-67, figure 11a) in said mouse rotatably contacting said mousepad (column 8, lines 47-52), said spherical member having associated signal generating circuitry (**planar circuit board**, column 3, lines 66-67, **emitter 248**, **detector 250**, column 16, lines 64-67, column 19, lines 18-26) operable to move a cursor in said display (column 1, lines 21-23, column 7, lines 1-4),

a frictional force component addition in the plane of said mouse pad opposing said mouse movement (since a mouse has a ball 242 for movement across a surface, column 16, lines 60-67, rotational friction is present, column 4, lines 51-52).

Allowable Subject Matter

10. Claims 5-8, 9-11, 13-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,828,364 Siddiqui

Reference Siddiqui is made of record as it discloses a mouse-type pointing device in a computer system.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Francis Nguyen** whose telephone number is **(703) 308-8858**.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington,

VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


Francis Nguyen

September 27th, 2001